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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/823,551

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Ralph E. Crenshaw

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03/15/2006

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EXAMINER

SWARTHOUT, BRENT

ART UNIT

PAPER NUMBER

2636

DATE MAILED: 03/15/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/823,551	Applicant(s) CRENSHAW ET AL.	
	Examiner Brent A. Swarthout	Art Unit 2636	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-30 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-19, 21, 23-25 and 27-30 is/are rejected.
- 7) ☒ Claim(s) 20, 22 and 26 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>11-29-04</u> . | 6) <input type="checkbox"/> Other: ____. |

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1. Claims 1,3-6,8,10-17,19, 21,23,24,27,28 and 30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Merriman et al. in view of Perkins.

Merriman discloses a system for interfacing a communication signal with a three phase electrical power network in a building with a service panel comprising providing a carrier current device with power line carrier signal (col. 4, lines 15-20), a passive coupling device to connect the power line carrier signal to each phase of the power distribution network (col. 1, lines 45-51; col.4, lines 32-37; col.5, lines 33-36), the passive coupler adapted to be connected to a panel board 120 (col. 3, lines 17-29), except for particularly stating that the three phase network is a Wye or Delta connected distribution network.

Perkins discloses connecting communication signals to all three phases of a Wye-Delta distribution network (Fig. 1, col. 2, lines 10-35).

It would have been obvious to use a service panel for a panel board as taught by Merriman, in order that equipment could have been serviced at the panel, in order to avoid having to disrupt walls and other static structures to gain access to equipment. Choosing to use a passive coupling arrangement as disclosed by Merriman in conjunction with a Wye or Delta network as suggested by Perkins would have been obvious to one of ordinary skill in the art, merely depending on what type of power distribution network was already in place in order that signals could have been communicated over an existing network.

Regarding claim 3, Merriman teaches use of voltage in the 277-volt range (col. 3, line 22).

Regarding claim 5, Merriman teaches use of a 3 phase network (col. 4, line 32).

Regarding claim 8, coupler in Merriman outputs signal to all three phases (col. 5, lines 33-36).

2. Claims 2,7,9,18,25 and 29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Merriman et.al. in view of Perkins and Abraham .

Abraham teaches desirability of using a power line communication system with a centrally located service panel 25 with circuit breaker box 26.

It would have been obvious to use a centrally located service panel as taught by Abraham as the location for a service panel in a system as disclosed by Merriman and Perkins, since this would have allowed the most electrical wiring connections to be accessible from one point, and a residential load center and main circuit breaker would have been at the most centrally located service panel in a building, in order to allow access at the most convenient point.

3. Claims 1,5,17,21 and 23 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

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In claim 1, lines 5-6 "said three phase power distribution network" and "said three phase power distinction network" have no antecedent basis.

In claim 5, lines 6-8 "said power line distribution network" has no antecedent basis.

In claim 5, line 7 "said first location" has no antecedent basis.

In claim 17, lines 5-6 "said three phase power distribution network" has no antecedent basis.

In claim 21, lines 6-8 "said power line distribution network" has no antecedent basis.

In claim 23, lines 6-8 "said power line distribution network" has no antecedent basis.

4. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Graham, Roth, Clarey and Carson disclose power line communication systems.

5. The specification should be amended to update status of parent application .

6. Claims 20 and 26 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

7. Claim 21 is objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim.

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Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form. Claim 21 claims the same subject matter as claim 5.

8. Claim 22 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Graham, Roth, Clarey, Carson and Rotem disclose power line communication and connection systems.

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Brent A Swarthout whose telephone number is 571-272-2979. The examiner can normally be reached on M-F from 6:30 to 4:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jeff Hofsass, can be reached on 571-272-2981. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

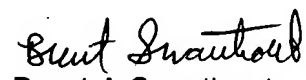
Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should

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you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Brent A Swarthout
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**BRENT A. SWARTHOUT
PRIMARY EXAMINER**